

Fig. 1

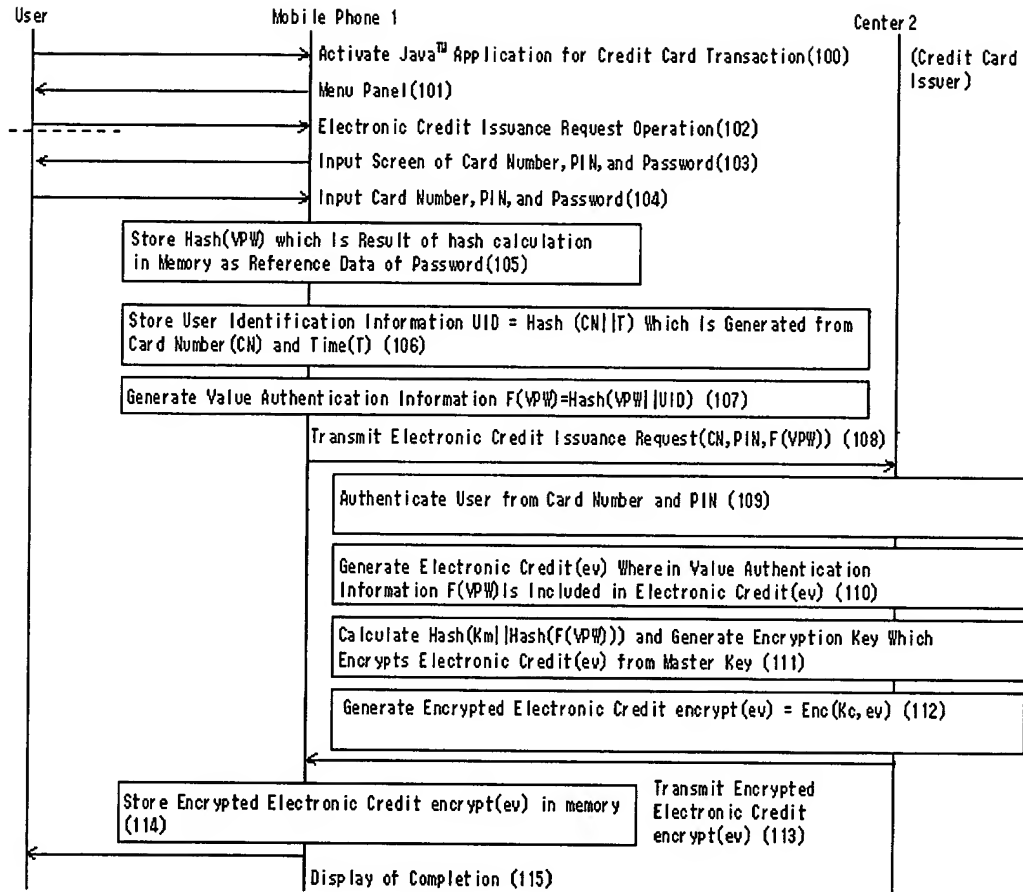


Fig. 2

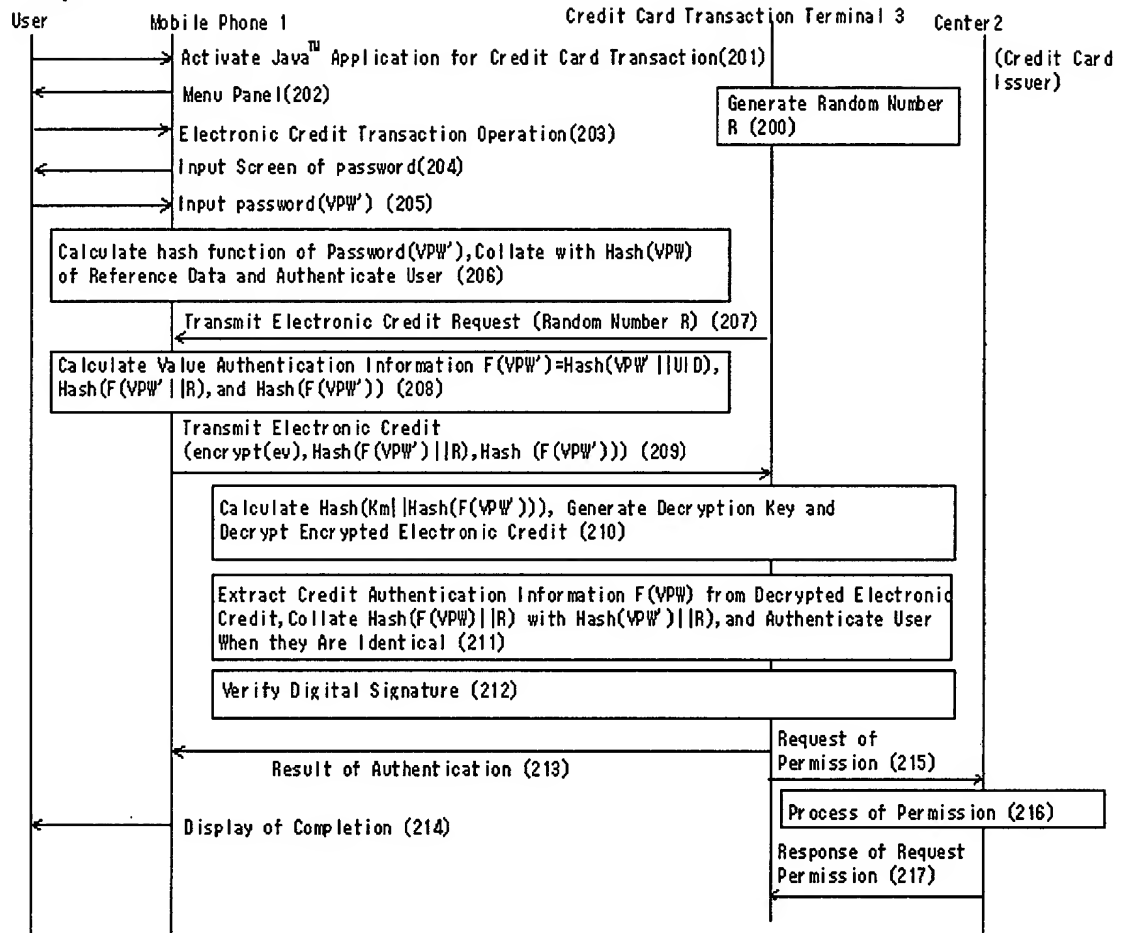


Fig. 3

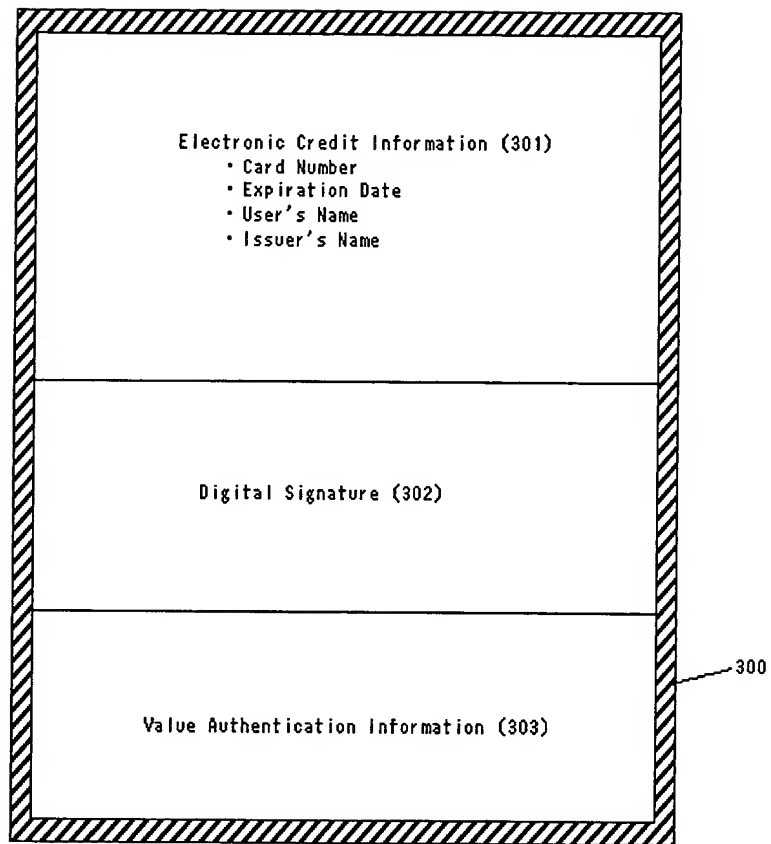


Fig. 4

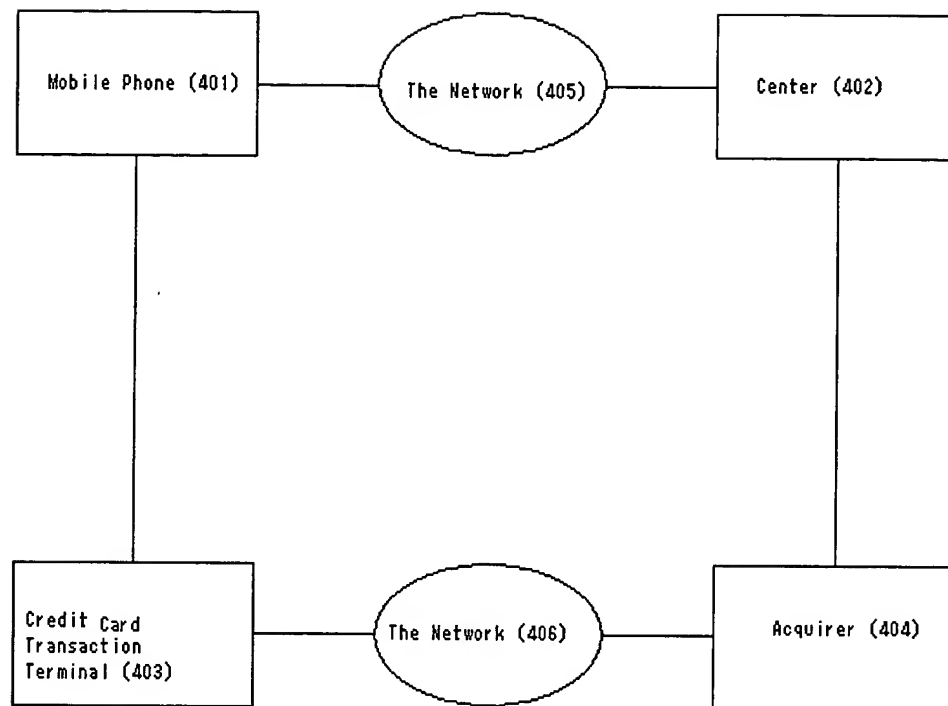


Fig 5

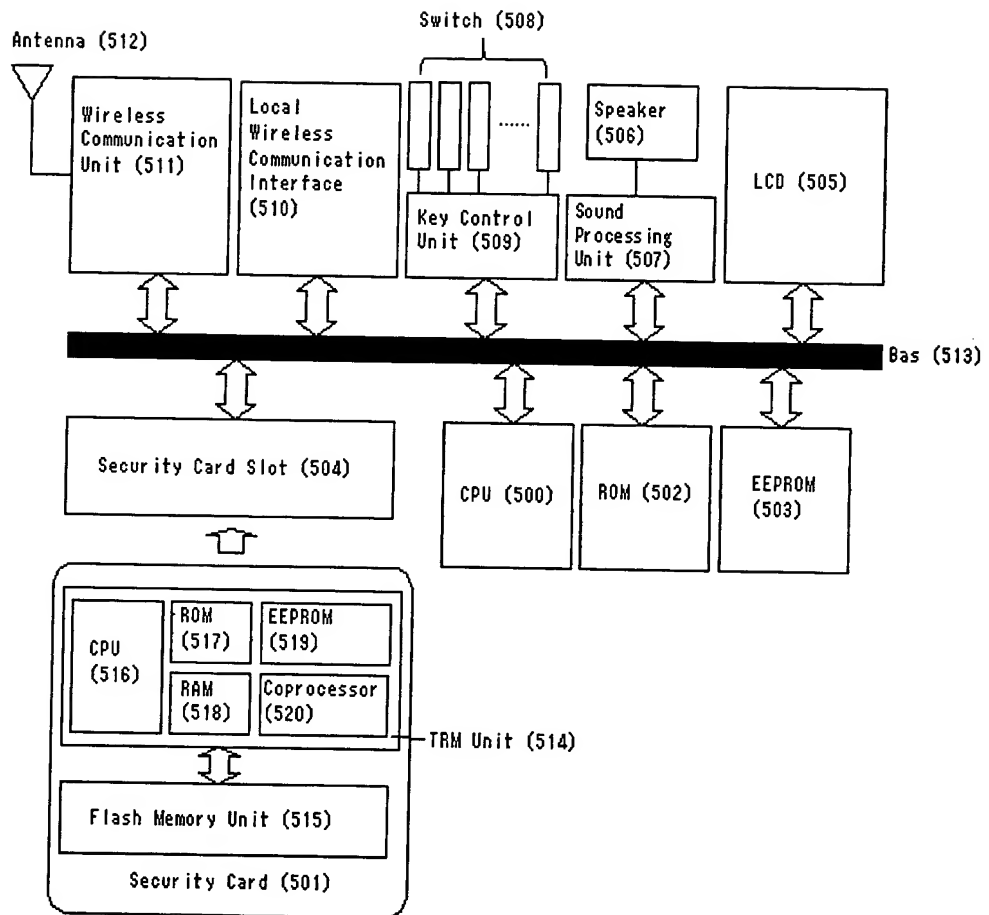


Fig. 6

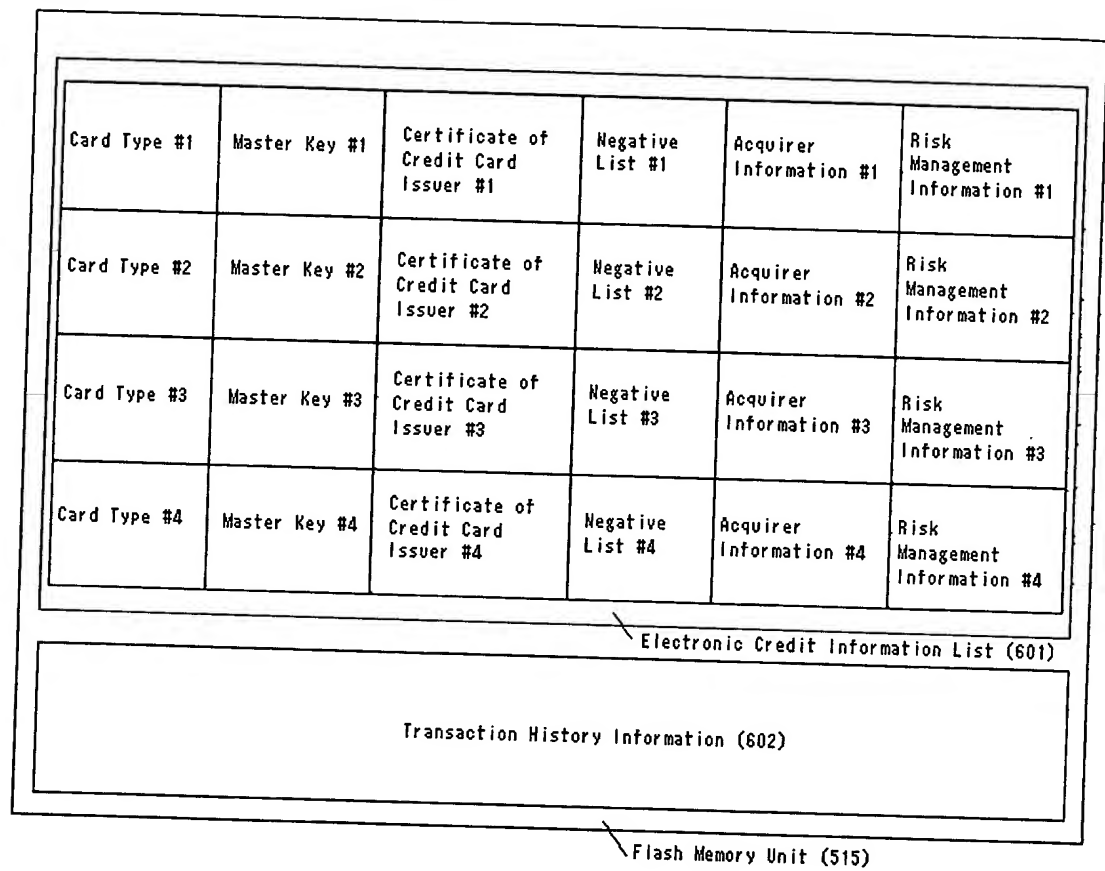


Fig. 7

| | |
|----------------------------------|--------------------------------|
| Wallet Display Information (701) | Wallet Sound Information (702) |
|----------------------------------|--------------------------------|

| Electronic Credit List (703) | | | |
|------------------------------|------------------------------------|----------------------|-------------|
| Reference Data #1 | User Identification Information #1 | Electronic Credit #1 | Property #1 |
| Reference Data #2 | User Identification Information #2 | Electronic Credit #2 | Property #2 |
| Reference Data #3 | User Identification Information #3 | Electronic Credit #3 | Property #3 |

Fig. 8

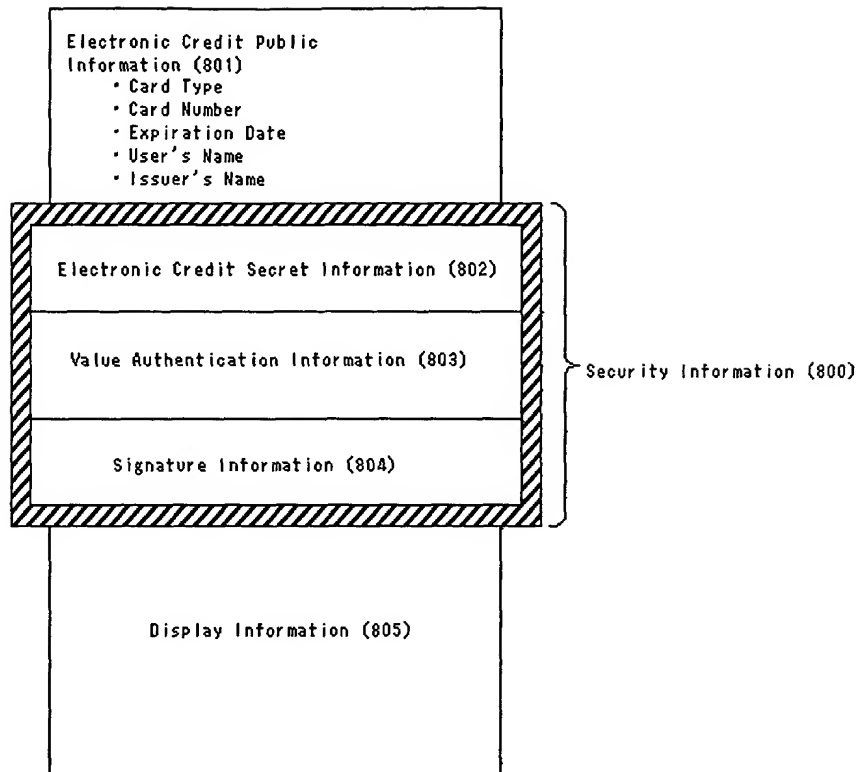


Fig. 9

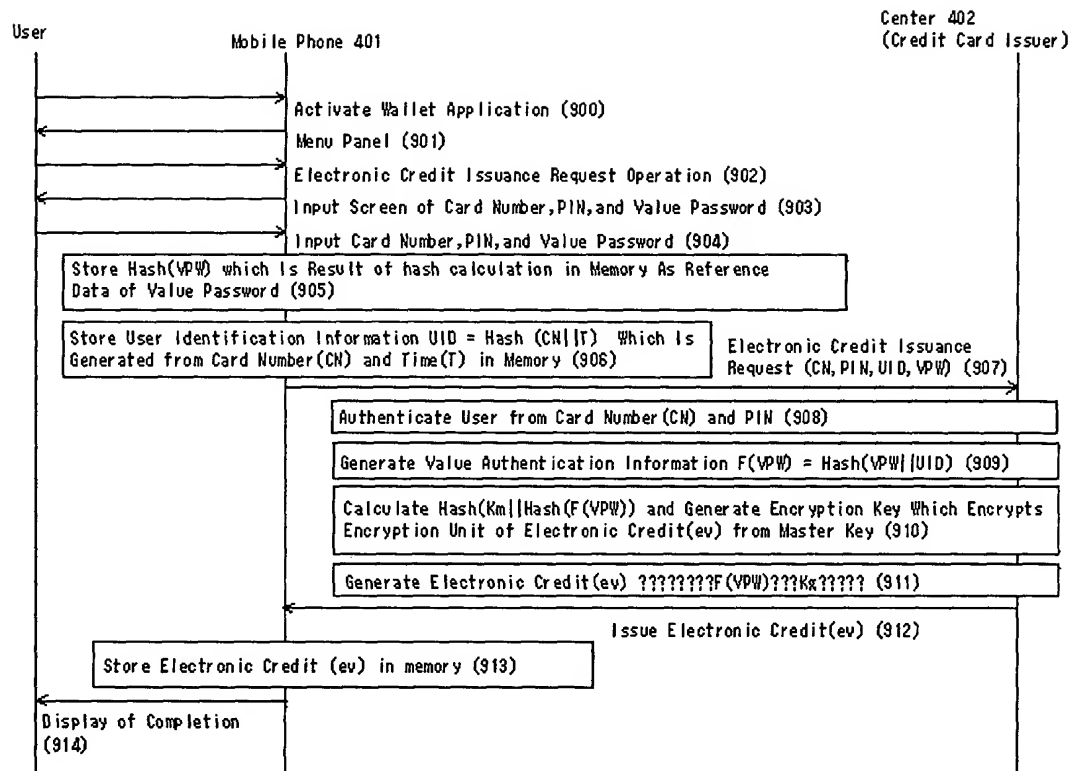
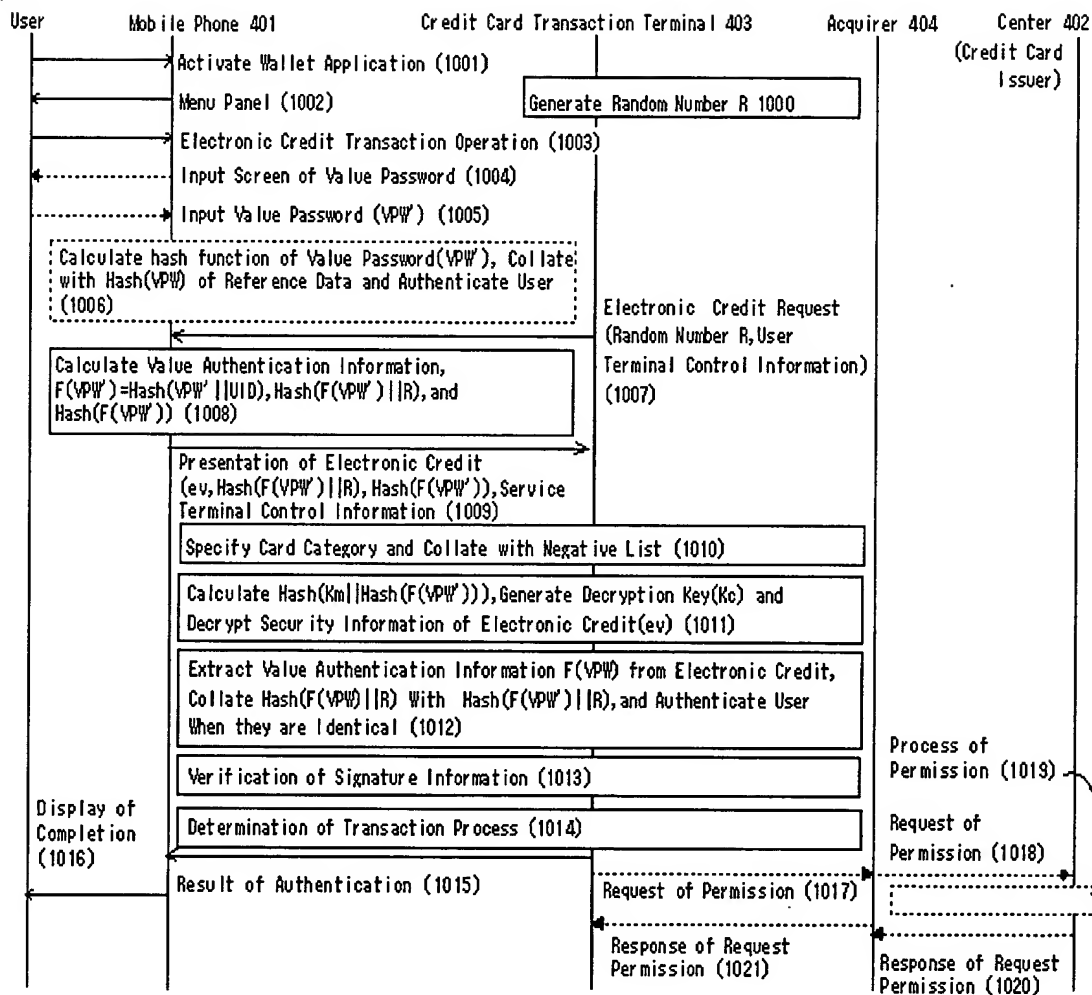


Fig. 10



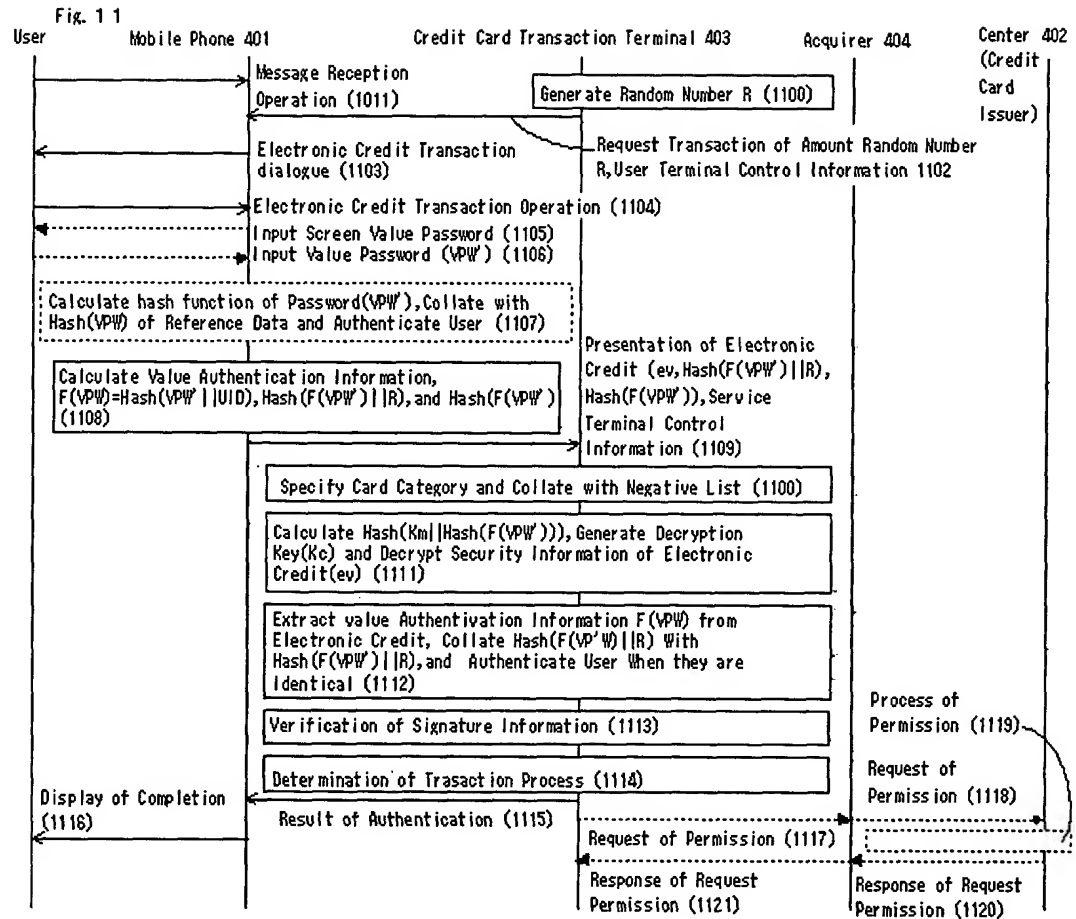


Fig. 1 2

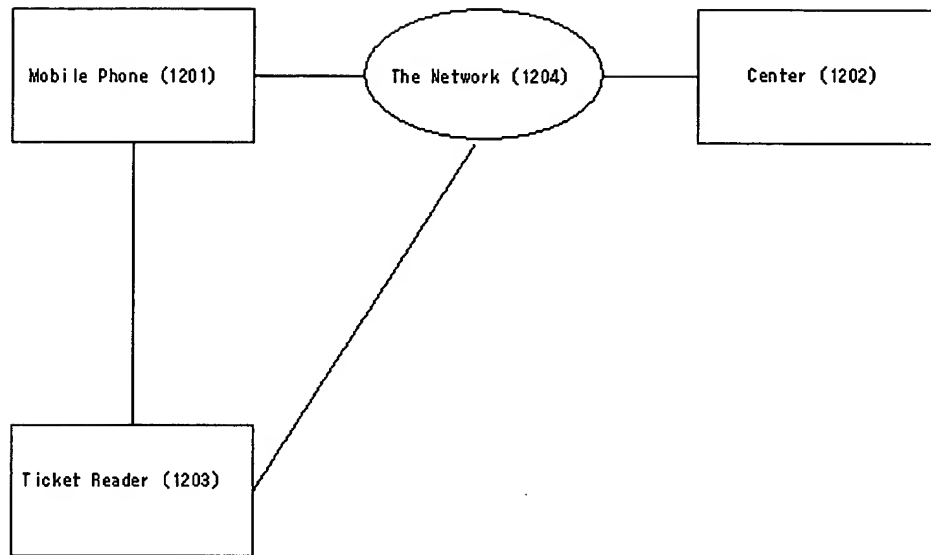


Fig. 13

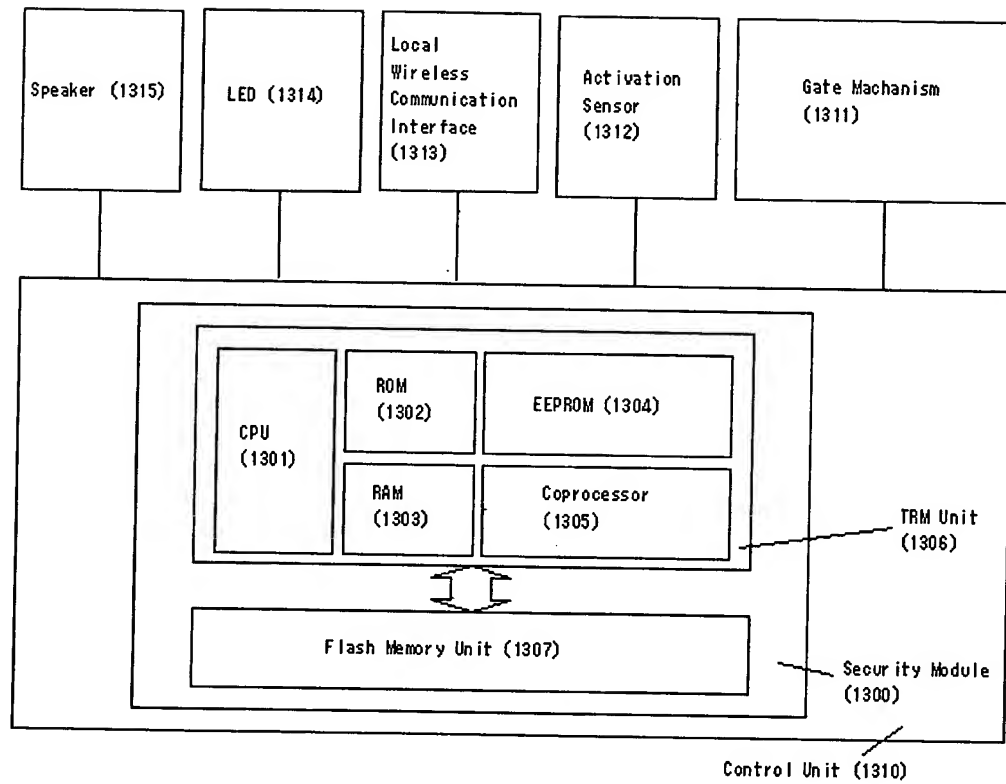


Fig. 1 4

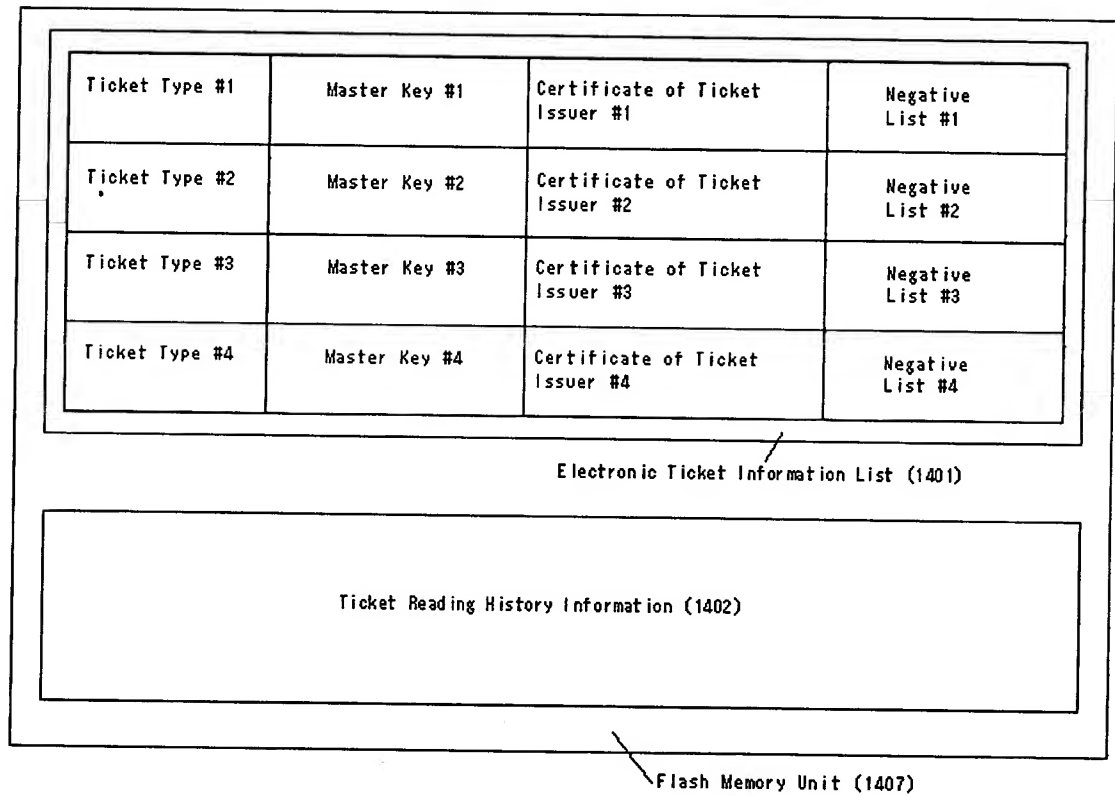


Fig. 1 5

| | |
|-----------------------------------|---------------------------------|
| Wallet Display Information (1501) | Wallet Sound Information (1502) |
|-----------------------------------|---------------------------------|

| Electronic Credit List (1503) | | | |
|-------------------------------|------------------------------------|----------------------|-------------|
| Reference Data #1 | User Identification Information #1 | Electronic Credit #1 | Property #1 |
| Reference Data #2 | User Identification Information #2 | Electronic Credit #2 | Property #2 |

| Electronic Ticket List (1504) | | | |
|-------------------------------|------------------------------------|----------------------|-------------|
| Reference Data #1 | User Identification Information #1 | Electronic Ticket #1 | Property #1 |
| Reference Data #2 | User Identification Information #2 | Electronic Ticket #2 | Property #2 |
| Reference Data #3 | User Identification Information #3 | Electronic Ticket #3 | Property #3 |

Fig. 16

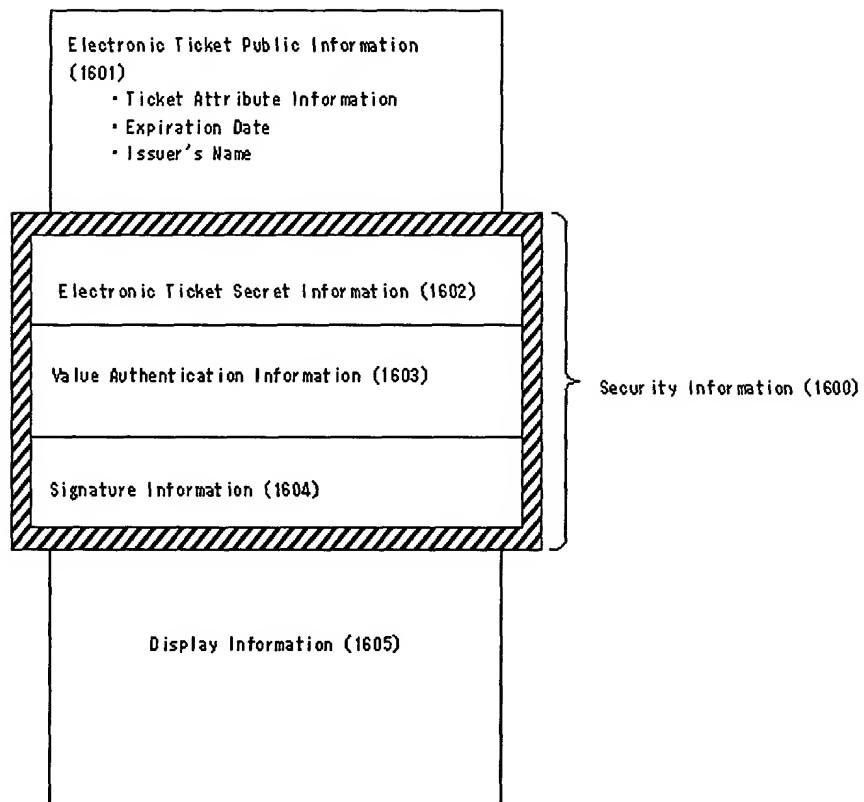


Fig. 17

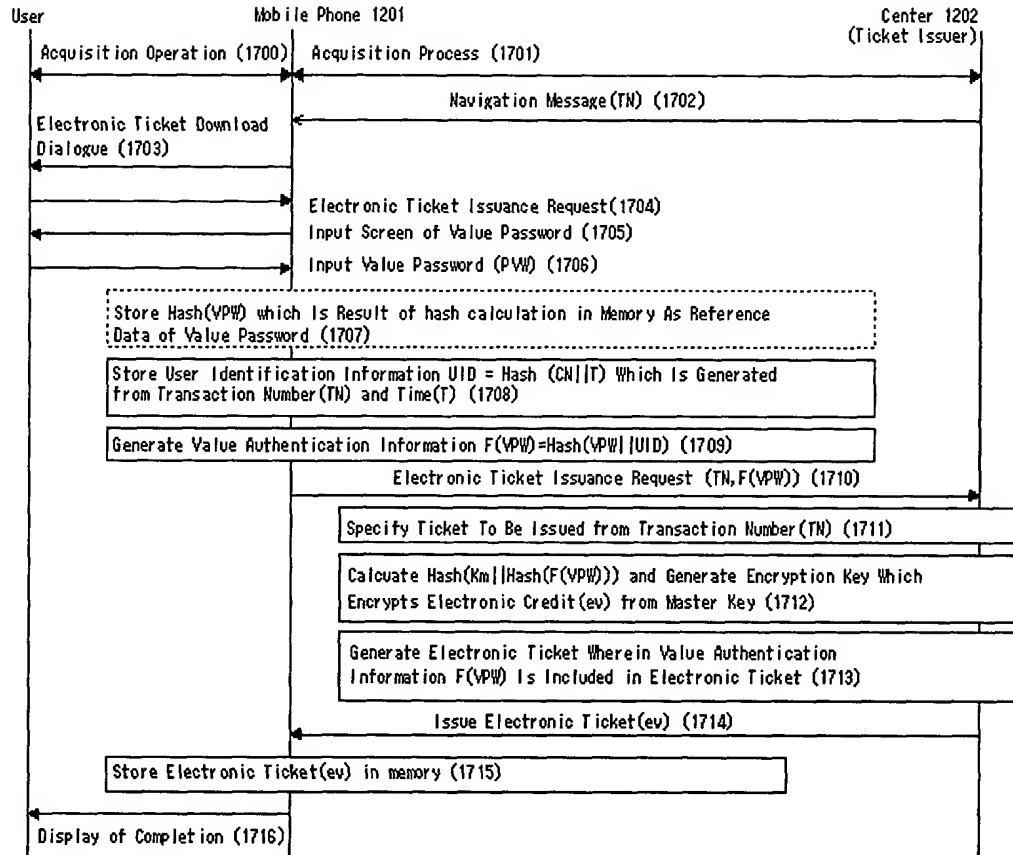
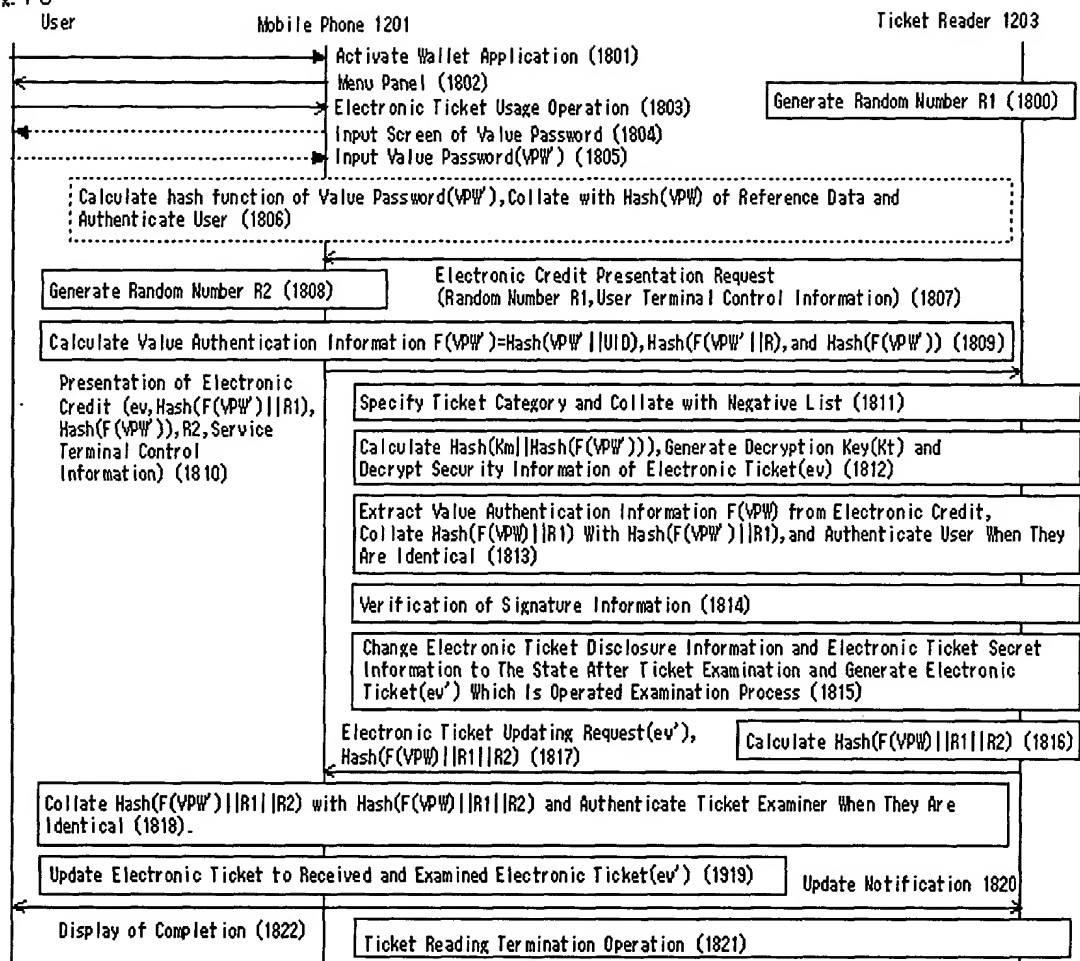


Fig. 18



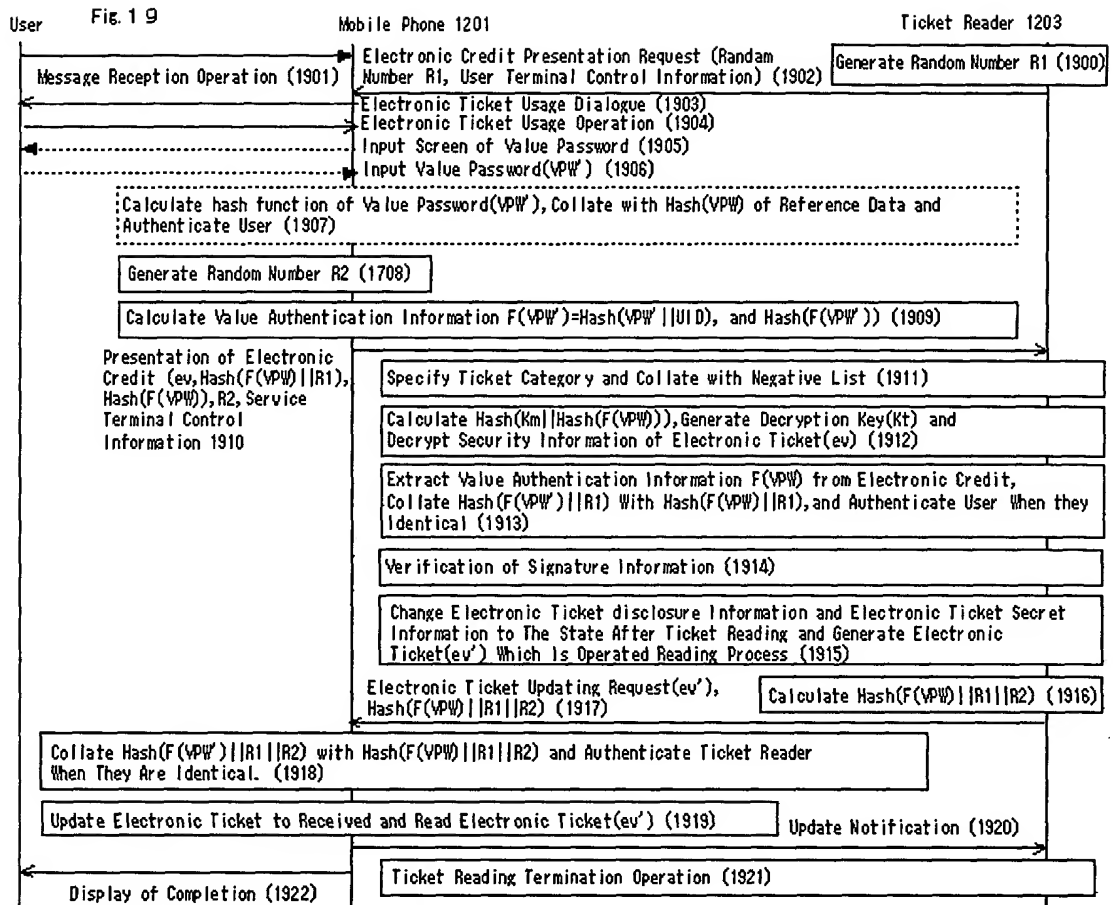


Fig. 20

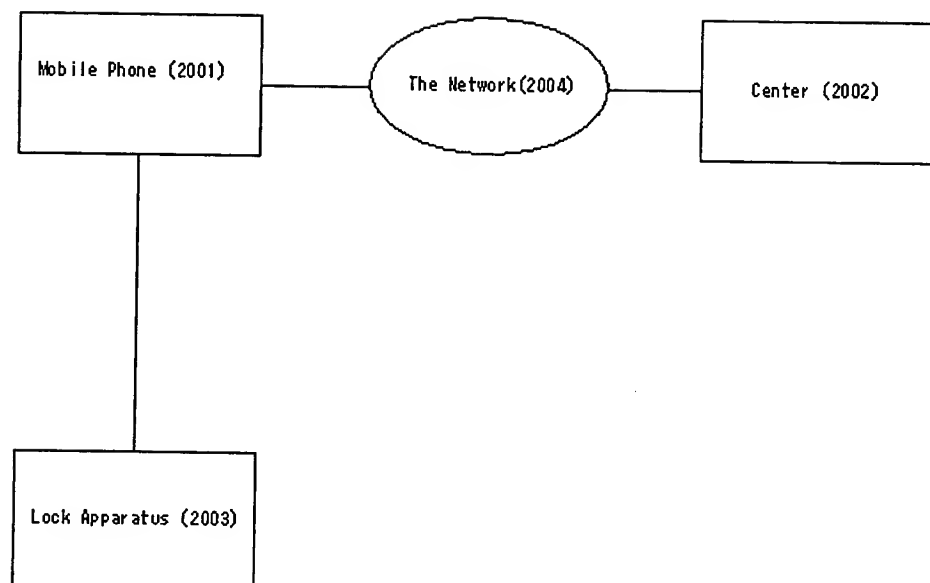


Fig. 2 1

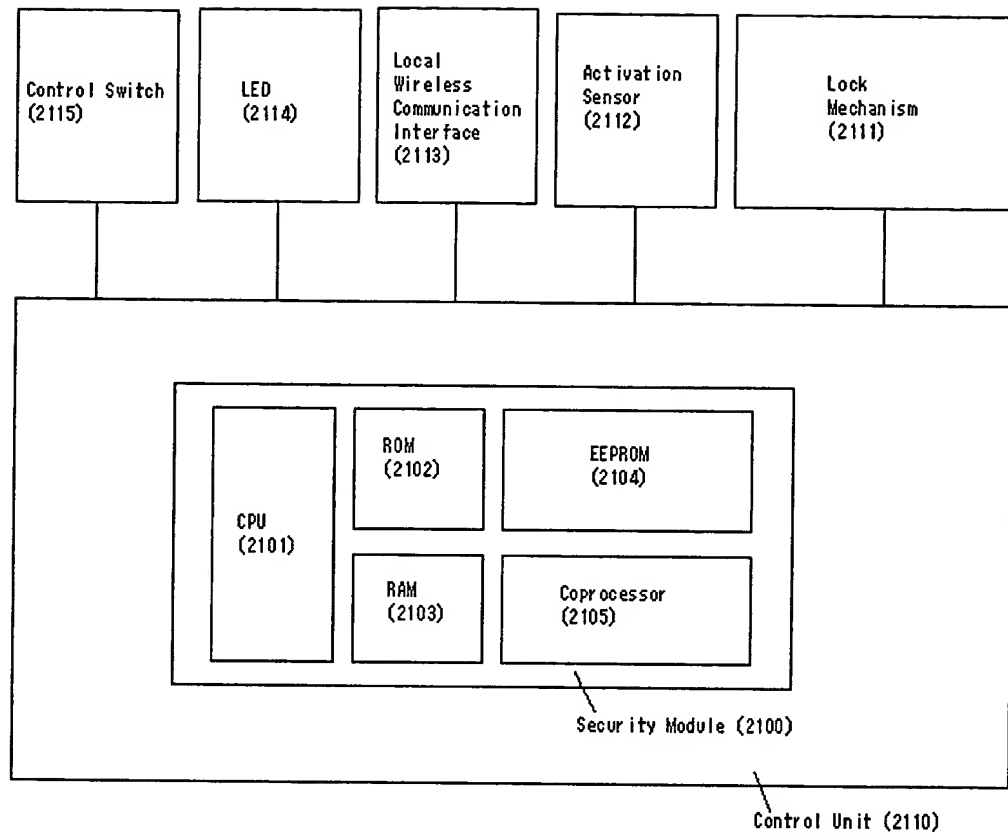


Fig. 2 2

| | |
|-----------------------------------|---------------------------------|
| Wallet Display Information (2201) | Wallet Sound Information (2202) |
|-----------------------------------|---------------------------------|

| Electronic Credit List (2203) | | | |
|-------------------------------|------------------------------------|----------------------|-------------|
| Reference Data #1 | User Identification Information #1 | Electronic Credit #1 | Property #1 |
| Reference Data #2 | User Identification Information #2 | Electronic Credit #2 | Property #2 |

| Electronic Ticket List (2204) | | | |
|-------------------------------|------------------------------------|----------------------|-------------|
| Reference Data #1 | User Identification Information #1 | Electronic Ticket #1 | Property #1 |
| Reference Data #2 | User Identification Information #2 | Electronic Ticket #2 | Property #2 |

| Electronic Lock List (2205) | | | |
|-----------------------------|------------------------------------|-------------------|-------------|
| Reference Data #1 | User Identification Information #1 | Electronic Key #1 | Property #1 |
| Reference Data #2 | User Identification Information #2 | Electronic Key #2 | Property #2 |
| Reference Data #3 | User Identification Information #3 | Electronic Key #3 | Property #3 |

Fig. 23

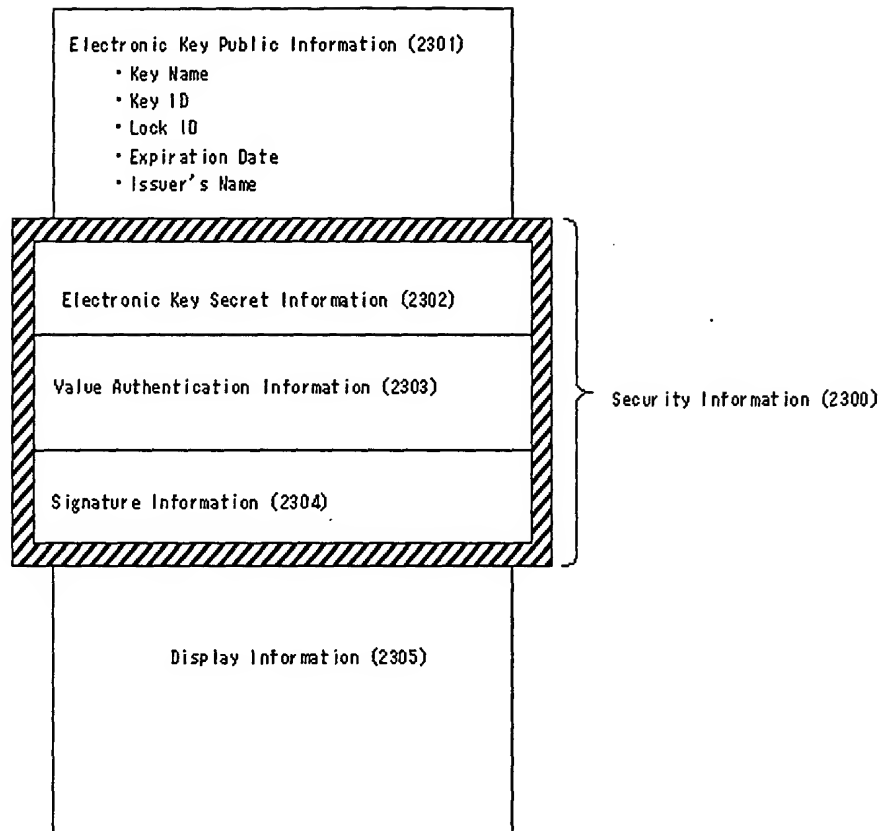


Fig. 24

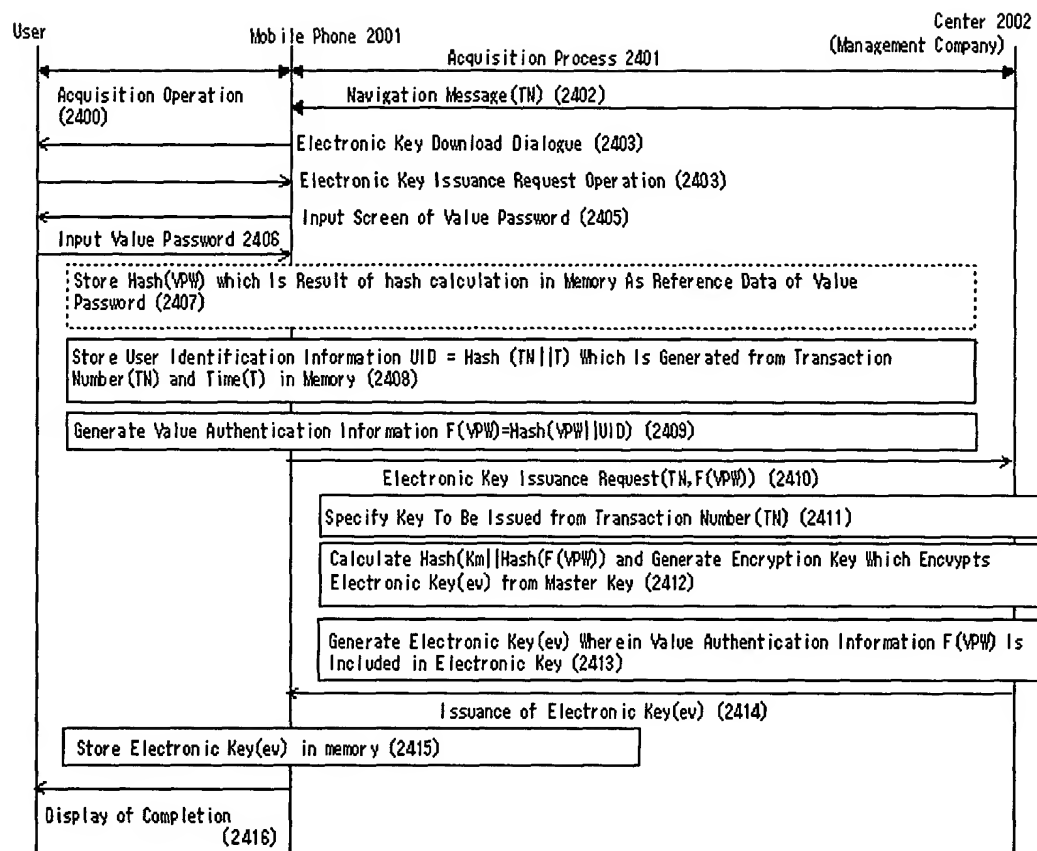


Fig. 25

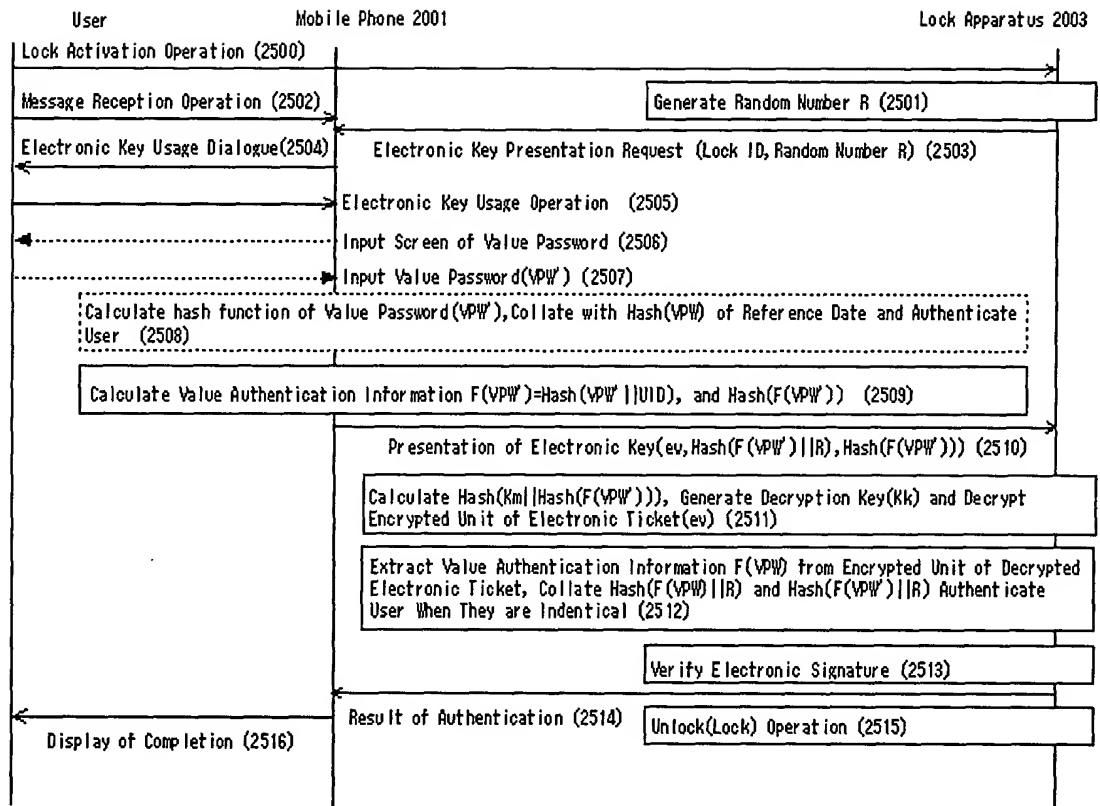


Fig. 26

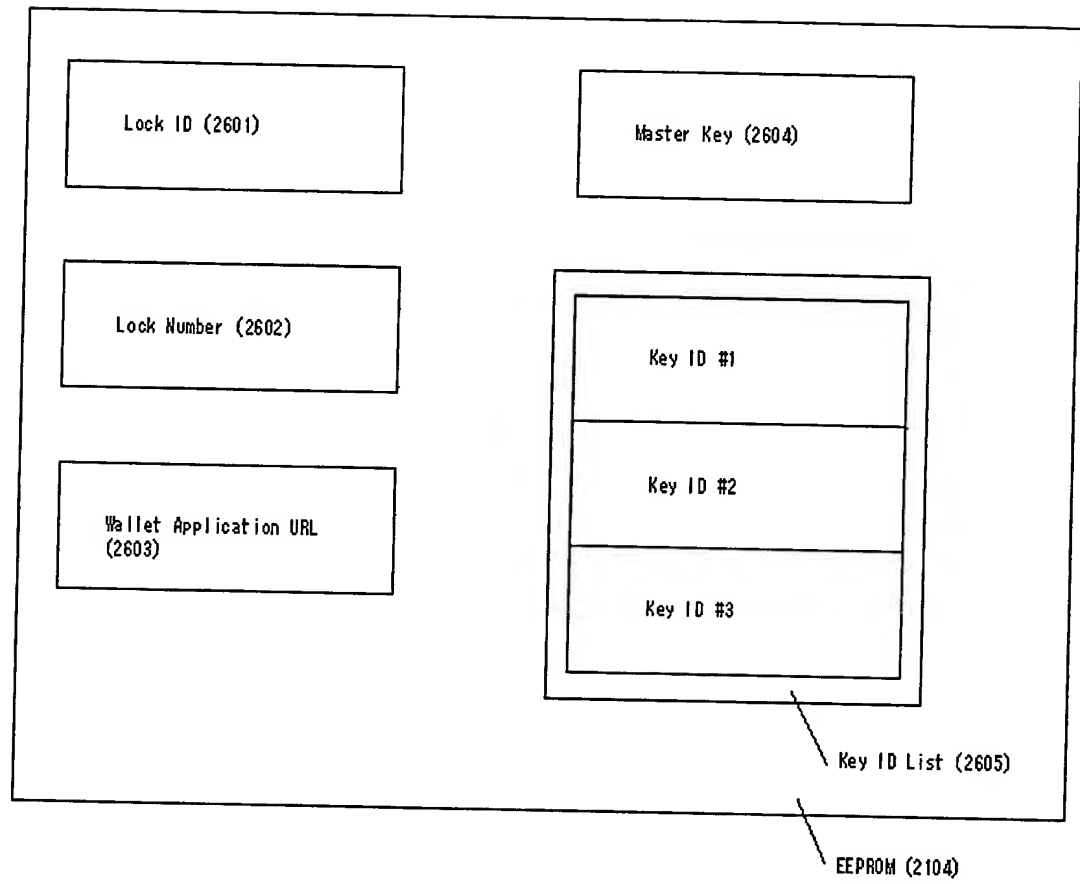


Fig. 27

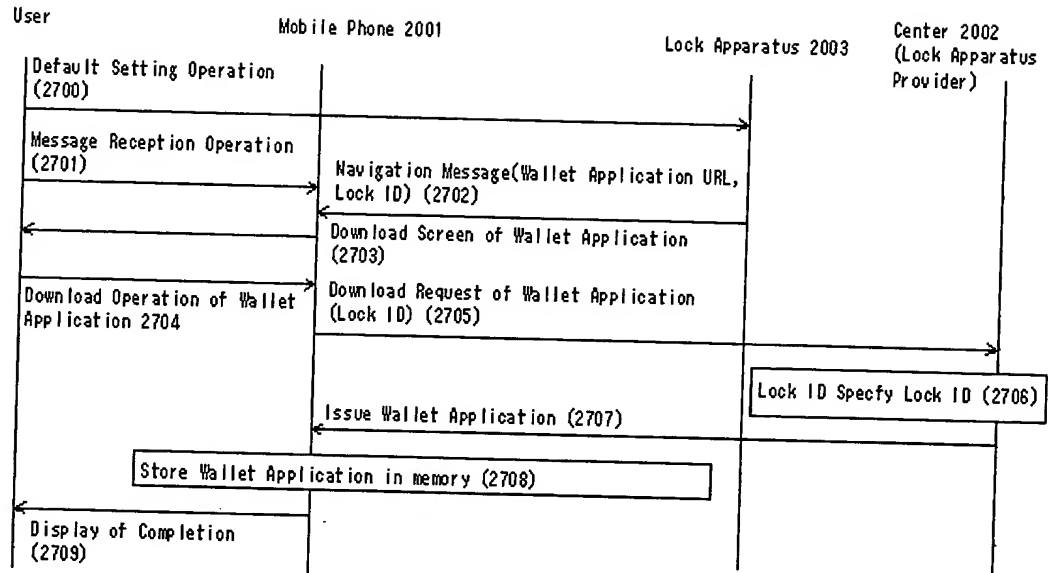


Fig. 2 8

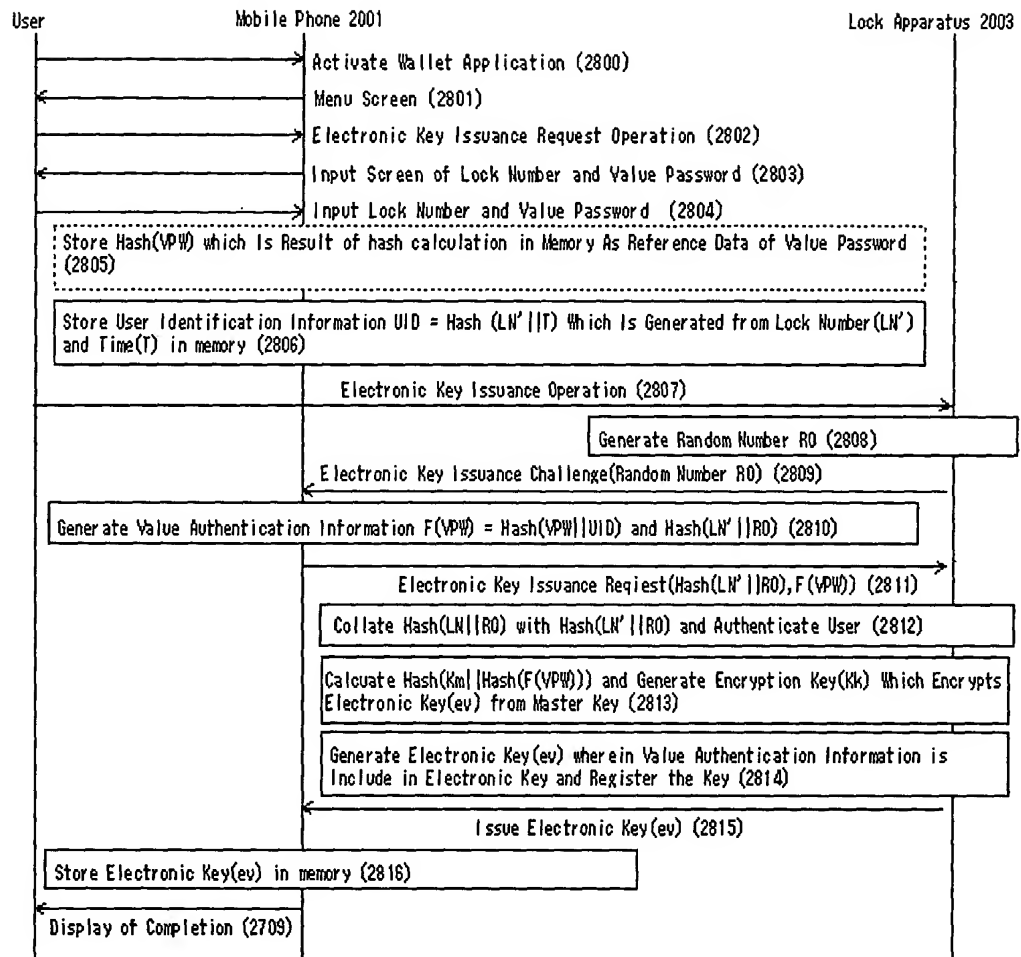


Fig. 2 9

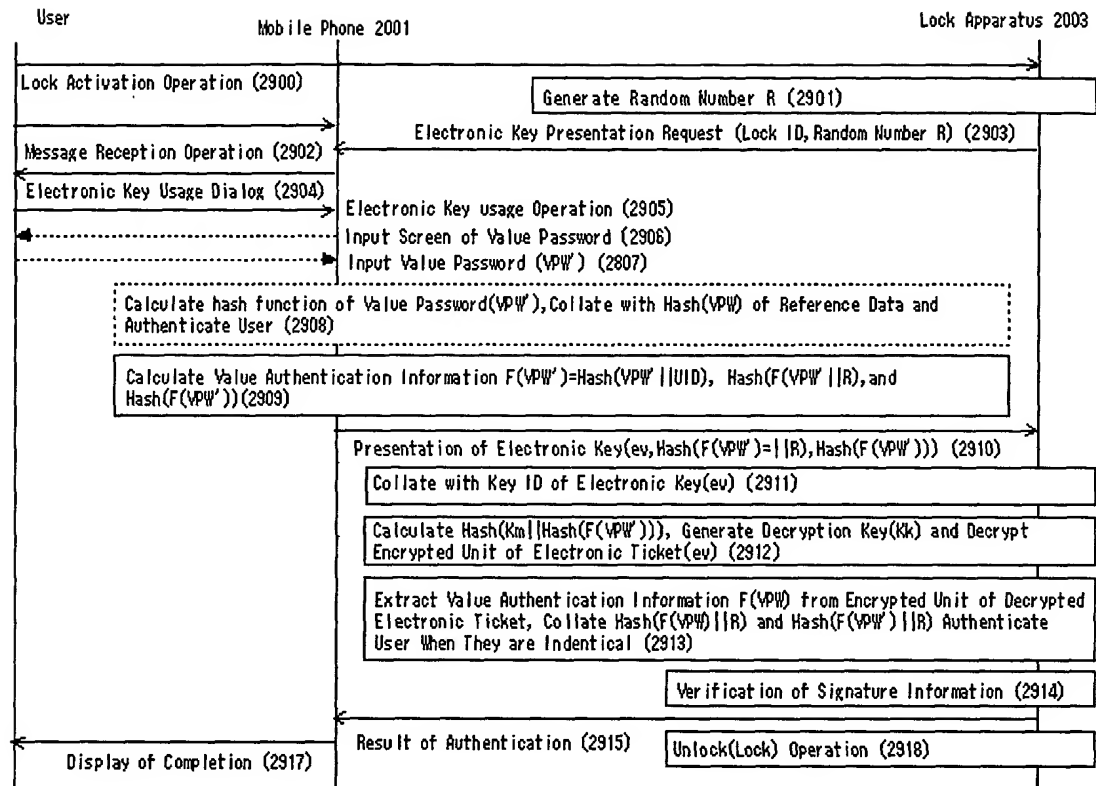


Fig. 30

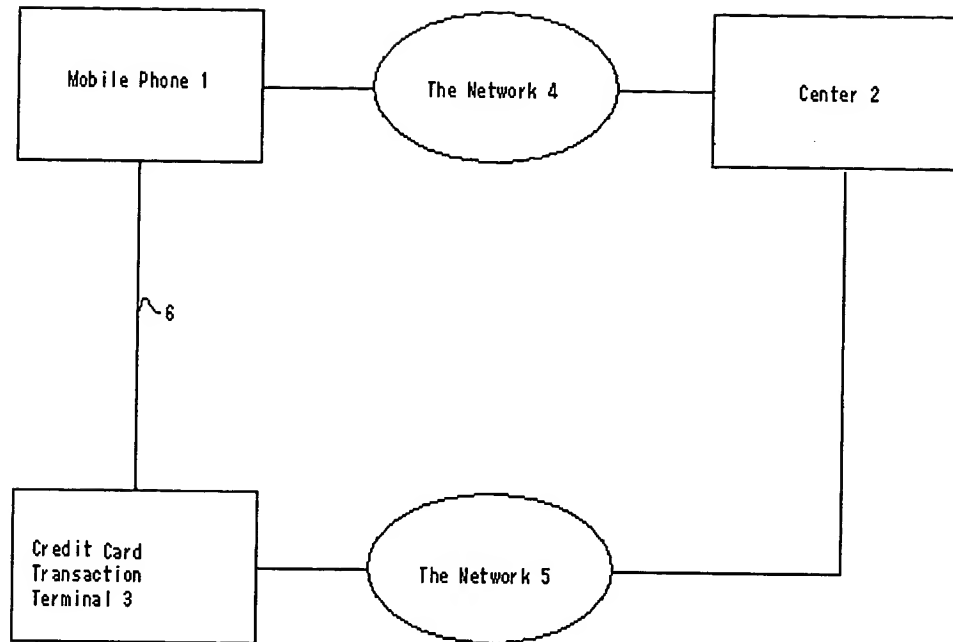


Fig. 3 1

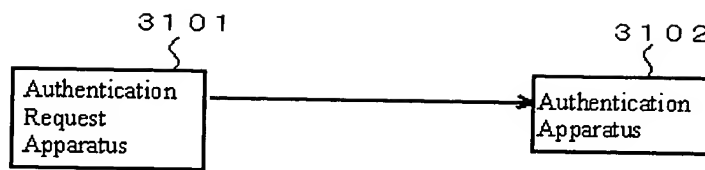


Fig 3 2

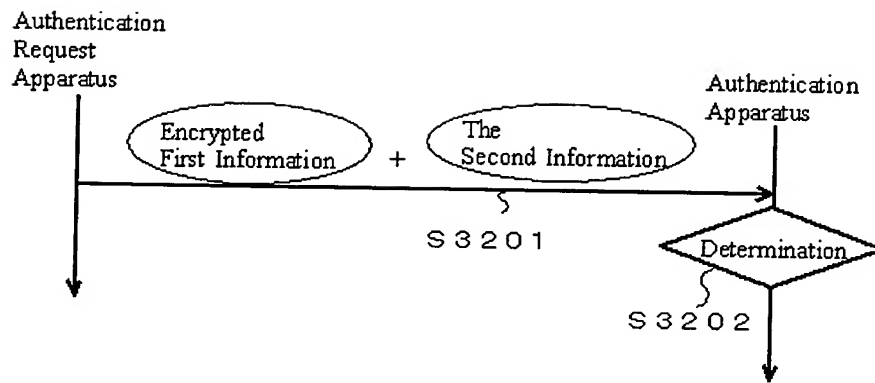


Fig. 3 3

(A)

| | |
|--------------------------------|---|
| Encrypted First Informaiton | Encrypt (Password) |
| The Second Information | Password |
| Condition of Determination | Decrypt (Encrypted First Informaiton) = The Second Information ? |

(B)

| | |
|--------------------------------|---|
| Encrypted First Informaiton | Encrypt (Password) |
| The Second Information | F (Password) |
| Condition of Determination | F (Decrypt (Encrypted First Informaiton)) = The Second Information ? |

Fig 3 4

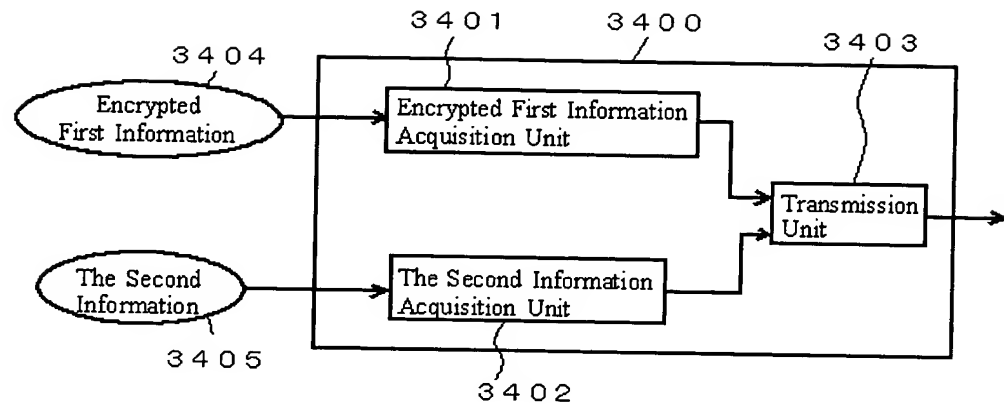
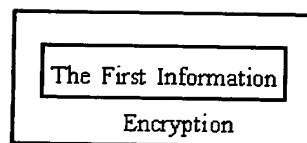


Fig 3 5

(A)



(B)

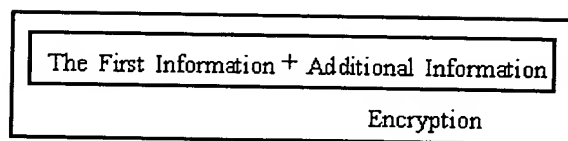


Fig. 3 6

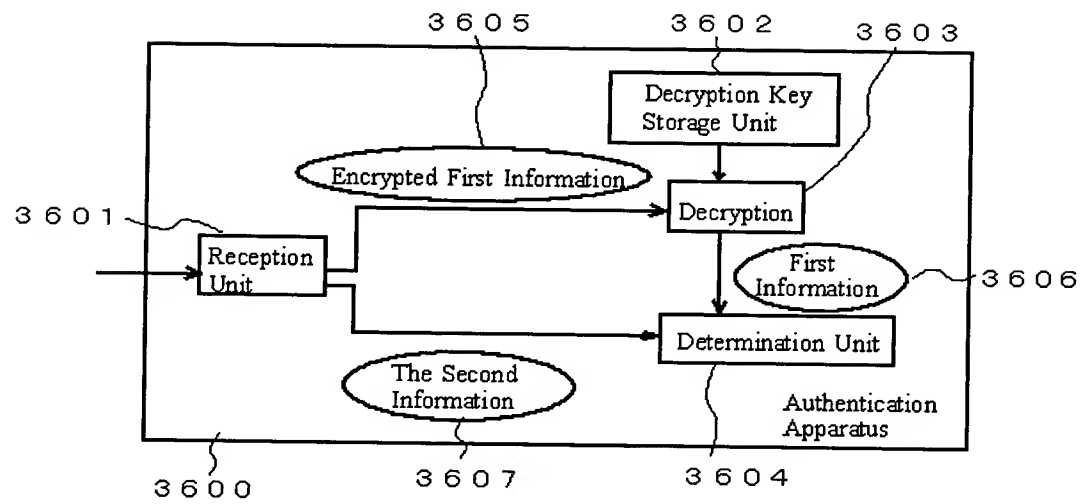
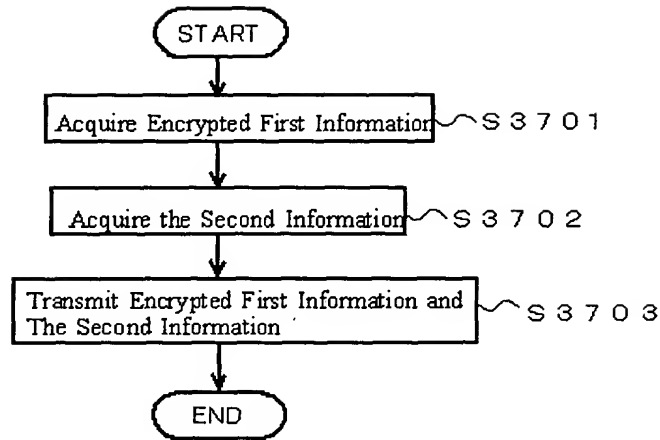


Fig. 37

(A)



(B)

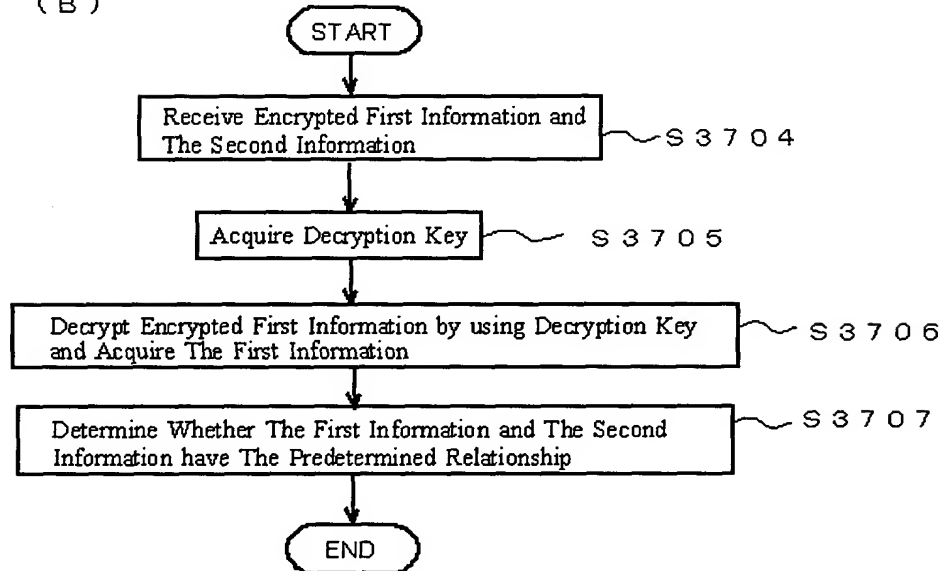


Fig. 3 8

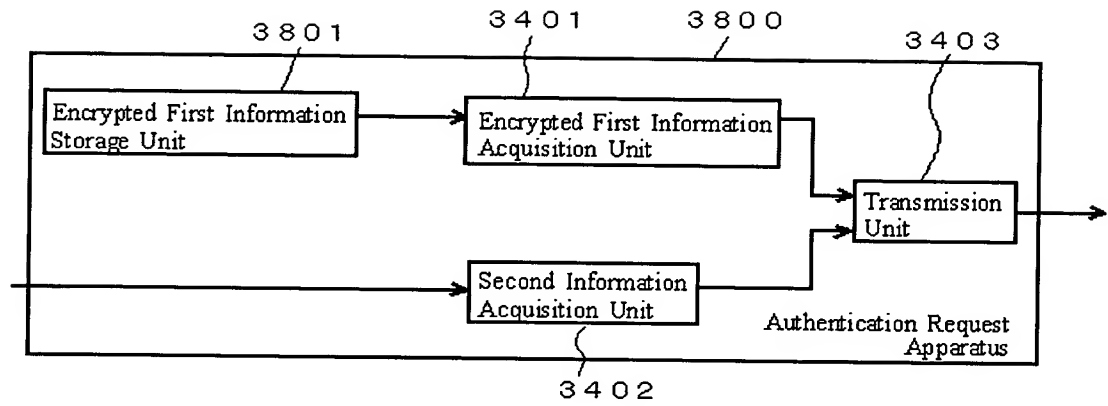


Fig. 3 9

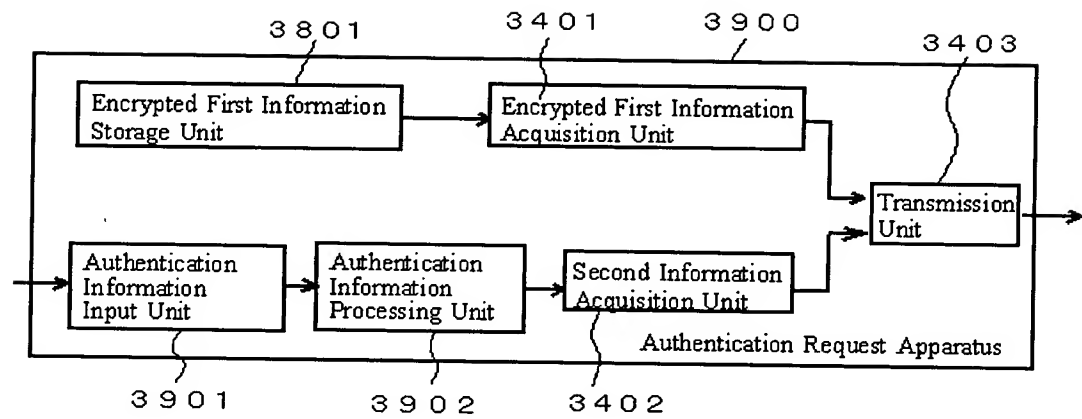
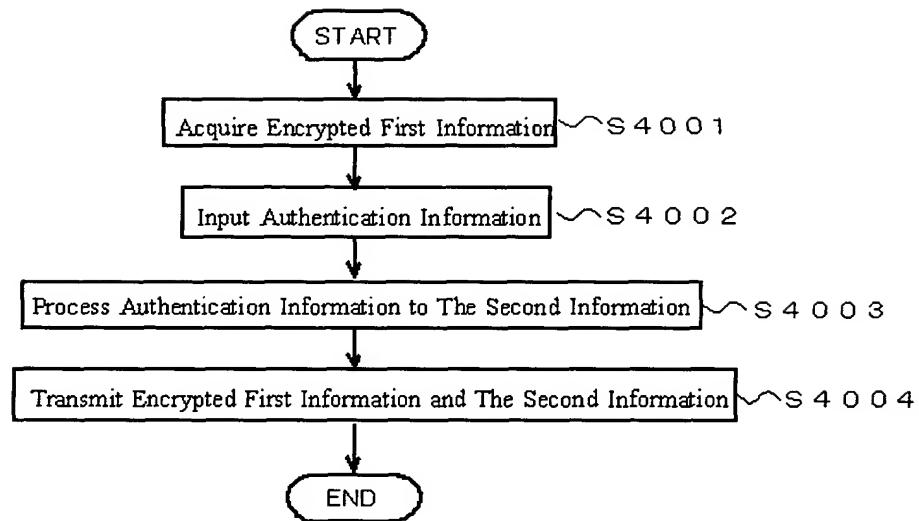


Fig 4 0

(A)



(B)

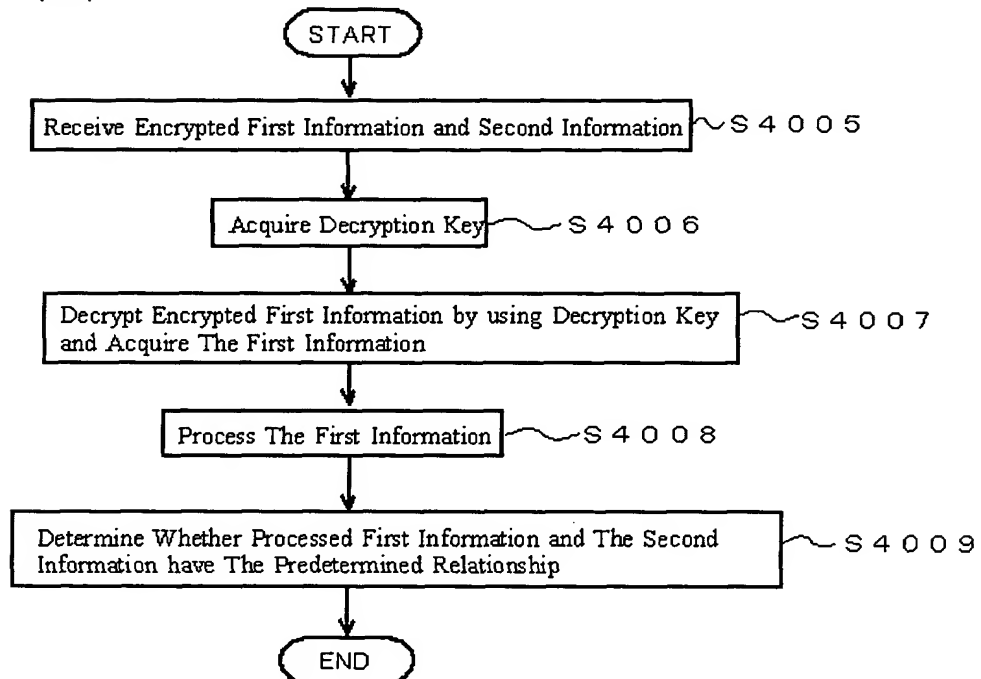


Fig. 4 1

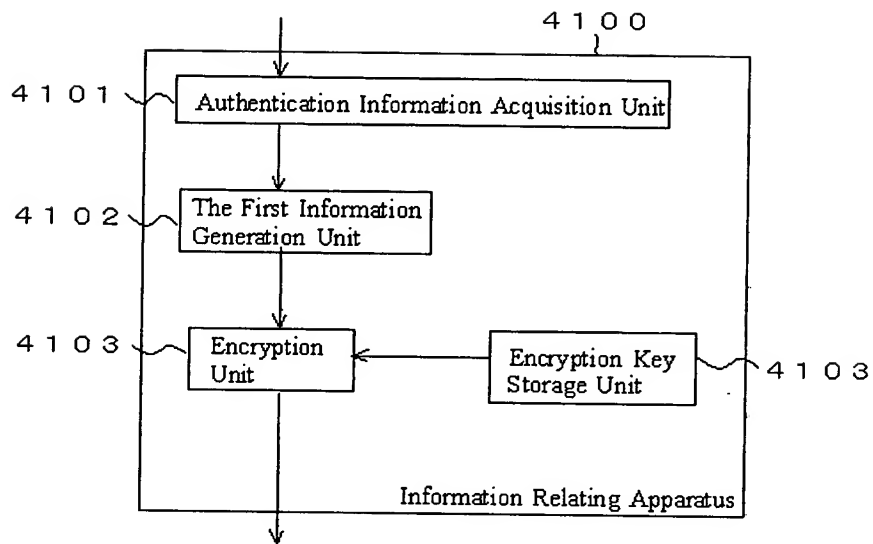


Fig 4 2

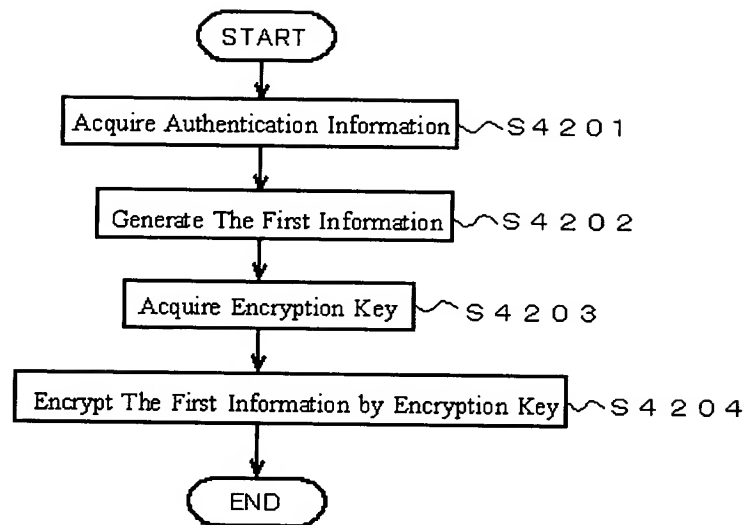


Fig 4 3

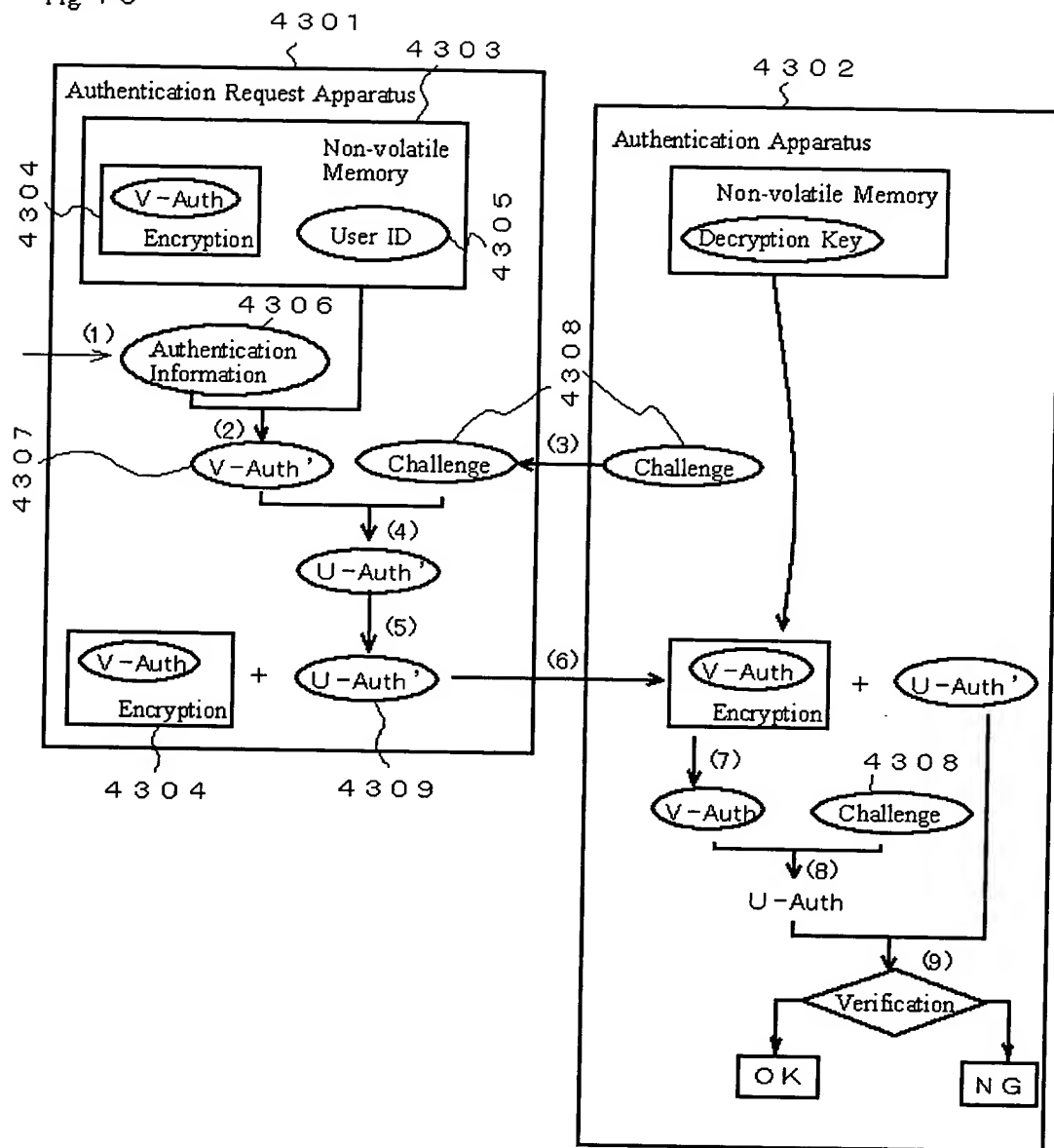


Fig. 4.4

- (1) $V\text{-Auth} = \text{Hash}_1(\text{Password} \parallel \text{User ID})$
- (2) $V\text{-Auth}' = \text{Hash}_1(\text{Authentication Information} \parallel \text{User ID})$
- (3) $U\text{-Auth}' = \text{Hash}_2(V\text{-Auth}' \parallel \text{Challenge})$
- (4) $U\text{-Auth} = \text{Hash}_2(V\text{-Auth} \parallel \text{Challenge})$